AMENDMENTS TO THE CLAIMS

Listing of Claims:

1-8. (Canceled)

9. (New) A composition comprising a plurality of substantially uniformly sized metal alloy particles, wherein each of the particles is at least partially encased within an organic macromolecule and has a largest dimension of no greater than about 100 nm.

10. (New) The composition of claim 9, wherein the metal alloy particles are ferromagnetisable.

11. (New) The composition of claim 9, wherein the metal alloy particles are ferrimagnetisable.

12. (New) The composition of claim 9, wherein the organic macromolecule comprises a protein.

13. (New) The composition of claim 12, wherein the organic macromolecule is apoferritin.

14. (New) The composition of claim 9, wherein the metal alloy particles are substantially spheroidal.

15. (New) The composition of claim 9, wherein the metal alloy particles comprise an alloy of two or more metals selected from the group consisting of: aluminium, barium, bismuth, cerium, chromium, cobalt, copper, iron, manganese, molybdenum, neodymium, nickel, niobium, platinum, praseodymium, samarium, strontium, titanium, vanadium, ytterbium, and yttrium.

16. (New) The composition of claim 15, wherein the metal alloy particles are selected from the group consisting of: an alloy of cobalt and platinum; an alloy of cobalt, platinum and chromium; an alloy of iron and platinum; an alloy of manganese and aluminium; an alloy of samarium and cobalt; and an alloy of neodymium and iron.

17. (New) The composition of claim 16, wherein the metal alloy particles comprise cobalt and platinum.

18. (New) A composition comprising a plurality of substantially uniformly sized metal alloy particles, wherein each of the particles is formed within the cavity of an apoferritin protein macromolecule.

19. (New) The composition of claim 18, wherein the metal alloy particles are ferromagnetic

20. (New) The composition of claim 18, wherein the metal alloy particles are ferrimagnetic.

21. (New) A process for preparing substantially uniformly sized metal alloy particles, each of the particles having a largest dimension of no greater than about 100 nm, the process comprising the step of forming each of the particles within an organic macromolecule.

22. (New) The process of claim 21, wherein the metal alloy particles are ferromagnetic

23. (New) The process of claim 21, wherein the metal alloy particles are ferrimagnetic.

24. (New) The process of claim 21, wherein the particles are spheroidal.

25. (New) The process of claim 21, wherein the organic macromolecule comprises a protein.

26. (New) The process of claim 25, wherein the organic macromolecule is apoferritin.

27. (New) The process of claim 25, wherein the metal alloy particles are formed by reducing a combination of metal salts in a solution in the presence of apoferritin.

28. (New) The process of claim 27, further comprising the step of annealing the metal alloy particles in a magnetic field.